AF/1644/BK

BEFORE THE BOARD OF APPEALS AND INTERFERENCES
IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Application of: Rubin et al.

Serial No. 09/871,388

Filed: May 31, 2001

For: *KUZ, A Novel Family of Metalloproteases*

Group Art Unit: 1644

Examiner: Nolan, Patrick J.

Attorney Docket No. B97-081-7

CERTIFICATE OF MAILING
I hereby certify that this corr. is being deposited with the US Postal Service as First Class Mail in an envelope addressed to the Comm. for Patents, PO Box 1450, Alexandria, VA 22313-1450 on May 6, 2003.

Signed _____
Richard Osman

BRIEF ON APPEAL

The Honorable Board of Appeals and Interferences
United States Patent and Trademark Office
P.O. Box 1450
Alexandria, VA 22313-1450

Dear Honorable Board:

This is an appeal from the March 11, 2003 final rejection of claims 14-21 and 23-33.

REAL PARTY IN INTEREST

The real party in interest is The Regents of the University of California and Exelixis, Inc., the assignee and licensee, respectively, of this patent application.

RELATED APPEALS AND INTERFERENCES

Appellants are unaware of any related appeals or interferences.

STATUS OF THE CLAIMS

Claims 14-33 are pending. Claim 22 is allowable. Hence, claims 14-21 and 23-33 are subject to this appeal.

STATUS OF THE AMENDMENTS

All Amendments are believed to be properly before the Board.

SUMMARY OF THE INVENTION

The invention is an antibody or antibody fragment which specifically binds a neurogenic protein called KUZ. Specification, p.3, line 3. The recited SEQ ID NOS: 2, 4, 6 and 8 refer to natural Drosphila, human transmembrane, human soluble and mouse KUZ protein sequences, respectively. Specification, p.4, lines 9-12.

ISSUES

I. WHETHER THE EXAMINER'S REJECTION OF CLAIMS 14-21 and 23-33 UNDER 35USC112, FIRST PARAGRAPH (WRITTEN DESCRIPTION) IS CORRECT.

GROUPING OF THE CLAIMS

For Issue I, all the claims stand as a group.

ARGUMENT

I. CLAIMS 14-21 and 23-33 ARE PATENTABLE UNDER 35USC112, FIRST PARAGRAPH (WRITTEN DESCRIPTION)

The claims are directed to an antibody or antibody fragment which specifically binds a recited KUZ polypeptide and distinguishes and does not specifically bind bovine mammalian disintegrin-metalloproteinase (MADM). The Examiner apparently believes there is no written support for the requirement that the antibody "distinguishes and does not specifically bind bovine mammalian disintegrin-metalloproteinase". We believe there is.

Our Specification teaches that KUZ binding specificity may be assayed by KUZ-specific antibody binding (Specification, p.5, lines 20-24), or by eliciting a KUZ-specific antibody (Specification, p.5, lines 28-29). Our Specification teaches that KUZ binding specificity distinguishes that of bovine MADM (Specification p.5, lines 29-31). Our Specification describes and teaches how to make KUZ-specific antibodies (Specification, p.8, line 18 - p.10, line 8).

The objected-to limitation is inherent in a KUZ-specific antibody. By specifically binding to the recited KUZ protein, the claimed antibody distinguishes and does not specifically bind bovine MADM. KUZ, by definition, must have a binding specificity that distinguishes MADM. Since KUZ binding specificity by definition includes binding of a KUZ-specific antibody, a KUZ-specific antibody must necessarily distinguish KUZ from MADM.

Appellants respectfully request reversal of the pending Final Action by the Board of Appeals.

We petition for and authorize charging our Deposit Account No.19-0750 all necessary extensions of time. The Commissioner is authorized to charge any fees or credit any overcharges relating to this communication to our Dep. Acct. No.19-0750 (order b97-081-7).

Respectfully submitted,
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CLAIMS ON APPEAL

14. A composition comprising an antibody or antibody fragment which specifically binds a KUZ polypeptide consisting of an amino acid sequence selected from the group consisting of SEQ ID NO:2, SEQ ID NO:4, SEQ ID NO:6, and SEQ ID NO:8, and distinguishes and does not specifically bind bovine mammalian disintegrin-metalloproteinase (MADM).

15. A composition according to claim 14, wherein the amino acid sequence is residues 320-673 of SEQ ID NO:2.

16. A composition according to claim 14 wherein the amino acid sequence is residues 212-454 of SEQ ID NO:4.

17. A composition according to claim 14, wherein the amino acid sequence is SEQ ID NO:6.

18. A composition according to claim 14, wherein the amino acid sequence is residues 213-455 of SEQ ID NO:8.

19. A composition according to claim 14, wherein the amino acid sequence is SEQ ID NO:2.

20. A composition according to claim 14, wherein the amino acid sequence is SEQ ID NO:4.

21. A composition according to claim 14, wherein the amino acid sequence is SEQ ID NO:8.

23. A composition according to claim 14, wherein the antibody or fragment thereof specifically binds the extracellular domain of the KUZ polypeptide.

24. A composition according to claim 14, wherein the antibody or fragment thereof specifically binds the intracellular domain of the KUZ polypeptide.

25. A composition according to claim 14, wherein the antibody is, or the fragment is a portion of, a polyclonal antibody.

26. A composition according to claim 14, wherein the antibody is, or the fragment is a portion of, a monoclonal antibody.

27. A composition according to claim 14, wherein the antibody is, or the fragment is a portion of, a single-chain antibody.

28. A composition according to claim 14, wherein the antibody is, or the fragment is a portion of, a mouse antibody.

29. A composition according to claim 14, wherein the antibody is, or the fragment is a portion of, a human antibody.

30. A composition according to claim 14, wherein the antibody is, or the fragment is a portion of, a mouse-human chimeric antibody.

31. A composition according to claim 14, wherein the antibody or the fragment is labeled.

32. A composition according to claim 14, wherein the antibody or the fragment is fluorescently labeled.

33. A method for making an antibody according to claim 14, comprising the step of immunizing a cell or animal with a polypeptide comprising an amino acid sequence selected from the group consisting of residues 320-673 of SEQ ID NO:2, residues 212-454 of SEQ ID NO:4, SEQ ID NO:6, and residues 213-455 of SEQ ID NO:8 or fragment thereof sufficient to elicit said antibody, whereby the antibody is elicited.